

REMARKS/ARGUMENTS

Applicant thanks the Examiner for the interview of July 15, 2005, in which the Examiner indicated that narrowing of the claims to contact centers and amending the claims to clarify the claimed invention may place the application in condition for allowance.

The Examiner rejects claims 50-92 under 35 U.S.C. §103(a) as being unpatentable over Sacerdoti and further in view of Microsoft Office 2000 professional edition.

The rejections are moot in light of the cancellation of the above claims. Applicants have added new claims 93-114, which are allowable over the cited reference. The cited references fail to teach or suggest at least the following italicized features of the independent claims:

93. In a call center comprising a plurality of agent stations and agents, a method comprising:

- (a) receiving a first set of data values, *the data being related to each agent, each agent station, and a call center function and being stored in a tabular form*;
- (b) generating a first graphical image representative of the first set of data values;
- (c) receiving a user selection of first and second data values in the first set of data values on the first graphical image, a first portion of the first graphical image being positioned between the selected first and second data values and second and third portions of the first graphical image being positioned on either side of the first and second data values;
- (d) *receiving a user selection of an editing function from among a plurality of predetermined editing functions*;
- (e) *applying the user selected first editing function to the first portion of the first graphical image but not the second and third portions of the first graphical image to generate a second graphical image, the second graphical image comprising the second and third portions on either side of the first and second data values and a fourth portion between the first and second data values, the fourth portion being generated from application of the user selected first editing function to the data values in the first portion and being different from the first portion*; and
- (f) *revising the first set of data values to yield a second set of data values conforming to the second, third and fourth portions of the second graphical image*.

105. A call center, comprising:

- (a) *a plurality of agent stations operable to receive customer contacts;*
- (b) *a plurality of agents operable to service the customer contacts;*
- (c) *an input operable to receive a first set of data values, the data being related to each agent, each agent station, and a call center function;*
- (d) *a storage medium operable to store the first set of data values in a tabular form; and*
- (e) *a call center simulator operable to:*
 - (i) *generate a first graphical image representative of the first set of data values;*
 - (ii) *receive user selected first and second data values in the first set of data values on the first graphical image, a first portion of the first graphical image being positioned between the selected first and second data values and second and third portions of the first graphical image being positioned on either side of the first and second data values;*
 - (iii) *receive a user selection of an editing function from among a plurality of predetermined editing functions;*
 - (iv) *apply the user selected first editing function to the first portion of the first graphical image but not the second and third portions of the first graphical image to generate a second graphical image, the second graphical image comprising the second and third portions on either side of the first and second data values and a fourth portion between the first and second data values, the fourth portion being generated from application of the user selected first editing function to the data values in the first portion and being different from the first portion; and*
 - (v) *revise the first set of data values to yield a second set of data values conforming to the fourth portion of the second graphical image, wherein the second set of data values is a simulation of contact center operations based on the first set of data values.*

Sacerdoti

Sacerdoti is directed to a three-dimensional graphics generation and display application that includes an authoring mode screen, which lists database elements that are to be graphically displayed along with a list of variables pertaining to the database elements. The application also presents a menu of graphics attributes. The user determines whether the graphics objects are balls for a scatter plot, bars for a bar chart, pie-shaped elements for a pie chart, or other 3D

representation. By clicking on a database variable in the list of variables and dragging it over an attribute on the attribute menu, the user can correlate the database variable with the graphics attribute. When the user correlates a variable to a graphics attribute, the correlation is noted by a legend that is displayed with the menu of attributes. The graphics are displayed in an animated 3D presentation with graphics attributes, including their motion over time, determined by the database variables which have been correlated to the attributes. In an alternative embodiment, the user can select variables to be presented, and a programmatic rule interpreter receives the variables and accesses a list of conditional rules to automatically correlate the variables to graphics attributes for presentation.

Sacerdoti teaches at col. 9, lines 36-39, the use of linear and spline buttons to select the method for interpolating between values of *existing* data variables. However, the interpolation method has no effect on the existing data variables themselves, as in the case of the editing functions of the present invention.

Sacerdoti further teaches at col. 9, lines 45-52, that a user can click on a graphics object 48 and move the object 48. When a graphics object is moved or otherwise has one of its attributes changed, the system simultaneously causes the underlying variable value in the database to be changed appropriately. However, Sacerdoti teaches that the user must manually manipulate the object to cause the database to be changed; Sacerdoti does not teach the simple selection of an editing function to perform the database change automatically.

Office 2000 Reference

The Office 2000 Reference ("Office 2000") fails to teach or suggest not only the selection of a range of values in an existing chart over which a graphically displayed function is to be edited and outside of which no edition is performed but also the use of user manipulable affordances in the existing chart to effect the editions. Office2000 is directed to the Excel product, which is premised on spread sheets being composed of a plurality of cells. Groups of cells may be linked together for purposes of applying a mathematical function, such as addition and subtraction, to the values in the cells. Various functions are provided for the user to select from. Excel permits a user to generate various types of graphical images from a group of cells, such as a pie chart, line and area charts, column and bar charts, and specialty charts. In *creating* a *new* graphical image, the reference states at page 611 that "[a]s you change options, the chart preview will reflect your changes. When you've finished setting options, click Next to continue." The reference fails to state what options are changed and previewed or how the options are selected. In editing an existing chart, the reference states at page 613 that, using drag-and-drop techniques, a data series can be selected and *added* to the chart (*i.e.*, a new range of values will be added to the chart outside of the existing ranges of values). The chart will be automatically updated to reflect the *added* data series. However, Office2000 does not discuss selectively editing an existing chart over only an *existing* range of the chart (*i.e.*, over a range that is not added to the chart as part of the editing process).

Although Office2000 teaches at page 594 absolute cell references that are not changed if a formula is filled or copied into another cell, this feature is taught in connection not with a editing a graphical image but with changing a cell value in a table of values. To implement the change as a graphical image, a new image would presumably need to be created. This is a cumbersome way to change graphical images until the desired image is generated. The claimed invention permits one to directly edit the graphical image using user manipulable affordances.

The Examiner's characterization of the reference in the Office Action fails to teach or suggest the features noted above. The Examiner references parts of Office2000 that allegedly anticipate the pending claims. In a first example, the Examiner references figs. 24.5 and 24.6 as illustrating the first graphical image of the tabular data in fig. 24.1 and altering the first graphical image in fig. 24.1 to produce a second graphical image as shown in figs. 23.6 and 23.7. Figs. 23.6 and 23.7 are not graphical images. The Examiner's illustration simply shows that numbers in tables or cells can be changed by selecting a different mathematical equation. It does not show that a graphical image can be changed directly over some values but not others by selecting an editing function.

In another example, the Examiner references page 614 and fig. 2412 as illustrating "adding data series to the first graphical image to create a second graphical image and also by adding more data series to the first and/or to the second graphical images the third and so on graphical images will be created." The problem with this example is that the added data series

are not existing values of the graphical image. They will be new values added to the graphical image.

In a final example, the Examiner defines the first graphical image as being represented by Reno and the second graphical image as being represented by Reno and Phoenix. The problem with this example is that the graphical images are different graphical images. The second graphical image does not include both changed and unchanged parts of the first graphical image over existing value ranges. Rather, the Phoenix sales values represent values added to the first graphical image.

Accordingly, the claims are allowable.

The dependent claims provide further reasons for allowance.

By way of example, dependent claims 94 and 106 generally require the first set of data values to be a table, the table to include a plurality of measurements of a parameter, the parameter to have a time varying value, and the set of data values to include a number of agents assigned to a selected task during a selected time period.

Dependent claims 95 and 107 generally require the table to be used to simulate a workflow process and the second set of data values to be a simulation of contact center operations based on the first set of data values.

Dependent claims 96 and 108 generally require a value associated with a specified location on at least one of the first and second graphical images to be displayed in response to the

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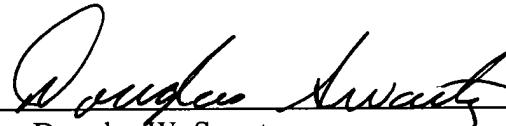
user positioning a cursor over the specified location, wherein the value is displayed in the vicinity of the cursor.

Dependent claims 103 and 114 generally require the plurality of editing functions include a plurality of a normal distribution, a Gaussian distribution, a Poisson distribution, a uniform editing function, a double ramp editing function, and an exponential editing function.

Based upon the foregoing, Applicants believe that all pending claims are in condition for allowance and such disposition is respectfully requested. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully submitted,

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